

REMARKS

The application has been amended to place the application in condition for allowance at the time of the next Official Action.

Claims 1-12 are pending in the application.

Applicant notes with appreciation the indication that claim 5 is allowed and that claim 10 is allowable.

Claims 1-3 and 8 were rejected as unpatentable over applicant's disclosed prior art Figure 5 in view of CAO et al 5,214,389. That rejection is respectfully traversed.

Claims 1 and 2 are amended and recite a bias voltage supplier for applying a bias voltage between a pair of pads of a chain pattern. Claims 1 and 2 further recite two probes arranged at a spacing determined by a distance between exposed portions inside of said pads. Support for the new claim language maybe found on page 10, line 27 to page 11, line 19.

By using the above noted structural configuration, an object of the present invention is met in that the recited detector is able to identify a defect of a measuring target having a small resistance value.

In contrast, the bias voltage supply 35 and the voltmeter 31 of CAO are both provided between the probes 17 and 18 of CAO such that a contact resistance exists between the probes and the measuring target, which renders the device of CAO unable to detect small resistance values.

Simultaneously providing the bias voltage supply and the voltmeter for detecting a potential difference between the measuring probes 17 and 18 creates a contact resistance such that CAO suffers from the same problems disclosed with respect to prior art Figure 5 (see page 5, line 28 to page 6, line 14 of the present specification), which the presently recited structure overcomes.

Specifically, as set forth above, a bias voltage supplier provided between a pair of pads provided on a chain pattern, and two probes provided for exposed portions existing inside the pads results in a slight change in resistance of a defective part being detected, while eliminating a contact resistance of the probes.

As the proposed combination of references does not suggest such a structure to eliminate contact resistance of the probes, the recited features would not have been obvious in view of the proposed combination.

Claims 3 and 8 depend from claims 1 and 2 respectfully and further define the invention and are believed patentable at least for depending from an allowable independent claim.

Claims 4, 6, 7, 9, 11 and 12 were rejected as unpatentable over applicant's disclosed prior art in view of CAO and further in view of ARNOLD et al. US Publication No. 2003/0062915. That rejection is respectfully traversed.

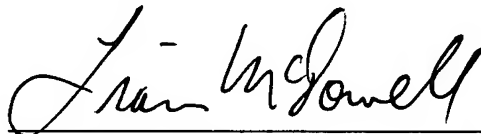
ARNOLD is only cited for the disclosure of features related to the shape of the probe. ARNOLD does not disclose what is recited in claims 1 and 2. As set forth above, applicant's disclosed prior art in view of CAO does not teach what is recited in claims 1 and 2. Since claims 4, 6 and 7 depend from claim 1 and claims 9, 11 and 12 depend from claim 2, and further define the invention, claims 4, 6, 7, 9, 11 and 12 are believed patentable at least for depending from an allowable independent claim.

In view of the present amendment and foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

A handwritten signature in cursive script, reading "Liam McDowell".

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